

## The Mental-Psychological Experiences of Living Liver Donors

Sun Ju Jeong<sup>1</sup>, Eun Kwang Yoo<sup>1</sup>,

<sup>1</sup> Department of nursing, Hanyang University, 222 Wangsimni-ro, Seongdong-gu,  
Seoul city, 133-791, Korea  
Eun Kwang Yoo, [glory@hanyang.ac.kr](mailto:glory@hanyang.ac.kr)

**Abstract.** The aim of this study is to investigate the aspect of the mental-psychological experiences of living liver donors living in Korean culture. This study is qualitative research design that applied ethnographic research method through in-depth face-to-face interviews and participant observation. Data was collected from 10 living liver donors of the snow ball method. The results were delineated into 4 domains, 23 categories, and 26 subcategories by theme and the 4 domains include: 'positive emotions', 'negative emotions', 'mental difficulties', and 'body image damaged'. An appropriate medical care and continuous and systematic mental-psychological consultation before and after donation for the donors are required and the development and support system for them must be arranged.

**Keywords:** living liver donors, experiences, mental-psychological, qualitative research

### 1 Introduction

With the use of a new type of immunosuppressant 'Cyclosporine' since 1979, the results of the liver transplant substantially improved and the demand for liver transplants has continuously increased due to the increased survival rate.

In Korea, a living donor liver transplantation was conducted for a 9-month old biliary atresia patient successfully in 1994, and the first living donor liver transplantation for an adult patient was conducted successfully in 1997. According to the statistics from Korea Network for Organ Sharing(KONOS)[1], 10,836 cases of liver transplants were conducted by March 2014. Among them, 2,366 cases were from brain dead donors while 8,470 cases were from living liver donors. However, for religious, cultural, and other reasons, the brain dead organ donation is restricted in Korea.

Living liver donors may experience fear and terror before operation and there is a high possibility of the occurrence of serious complications such as bile leak, bleeding, portal vein thrombosis, wound infection, seroma, atelectasis, pleural effusion, cicatrix, hernia, and even death[2]. Although most of them have to overcome these various experiences, the management of living liver donors is limited to physiological care during their hospitalization and most of them must solve their potential problems for themselves without receiving any appropriate help after being discharged[3]. This

indicates that the success rate and surviving rate have been focused on while our interest in the mental-psychological experiences of living liver donors has been neglected.

Accordingly this study is to find out what kind of experiences these living liver donors have gone through in their daily lives living in Korean culture to develop the appropriate care, management, and education programs and provide required basic data to develop the necessary support system and policy for liver donors.

## 2 Methods

This study is qualitative research that applied ethnographic research method to investigate what kind of mental-psychological experiences living liver donors experience in their daily lives living in Korean culture.

10 informants for this study were selected from the members of café.daum.net/liverdonor who voluntarily participated in this study. Their average age was 31.6 and donated part was right lobe of liver. Data collection was conducted through participant observation and in-depth interviews from July 2010 to March 2011, 2~3 times of interview per person were conducted for individual in-depth interviews and each interview required 1~3 hours. To protect the ethical aspect of the informants, the purpose of study, method of study, confidentiality, and cancellation of interview were explained to them.

Data analysis and data collection were a simultaneous ongoing process and they were analyzed based on the analysis method suggested by Spradley[4], and consulted by 2 professors of nursing who had experience in the qualitative research and 2 medical specialists.

## 3 Results

The mental-psychological experiences of living liver donors living in Korean culture were divided into 4 domains, 23 categories, and 26 subcategories. And the obtained 4 domains include 'positive emotions', 'negative emotions', 'mental difficulties', and 'body image damaged' (Table1).

**Table1.** The mental-psychological experiences of living liver donors

Domain	Category	Subcategory
Positive emotions	Happiness	Joy greater than pain
	Pride	Pride out of saving a life
	Gratitude	Gratitude to medical staff
Negative emotions	Fear and terror	Fear and terror about surgery
	Emptiness	Emptiness out of donation
	Perplexity	Cholecystectomy known after donation
	Unfairness	Unfairness about insufficient support

	Regret	Regret about donation
	Sadness	Having no sick leave from work
	Resentment	Resentment out of insufficient information
	Sense of loss	Death of recipient
	Frustration	Frustration about the changed life after donation
	Concern	Concern about health
	Sense of alienation and hurt	Focused interest on recipient
		Hurt from receiving notice to quit
	Disappointment and betrayal	Feeling disappointed and betrayed by recipient
	Difficulty in expressing feelings	Difficulty in open mind
Mental difficulties	Depression	Depression from slowed physical recovery
		Depression from helplessness
	Mental trauma	Mental shock after liver donation surgery
	Personality change	Feeling nervous and anger
	Sleep disorder	No deep sleep
	Reduced personal ability	Reduced desire and confidence
		Amnesia and loss of memory
Body image damaged	Damaged body	Difficulty in accepting damaged body
	Defensive posture	Defensive posture from scar

## 4 Discussion

This study completed a close investigation of the experiences of living liver donors through in-depth interviews and participant observation what and how they experienced in their daily lives.

The results of this study confirmed that they had more negative experiences than positive ones in the mental-psychological aspect. Haruki [5] argues that the mental burden of the donor is great because the surgery is intended to remove the part of an organ from a healthy person adding that they mostly have various mental-psychological problems. And this study has proved his argument. When the recipient died after transplantation, most donors felt frustrated And Shibata and others[6] report that donors feel anxious about their bodies after surgery and sometimes feel anger and depression. And it is similar to our study results. In addition, Hukunisi and others[7] report that 10% of donors are diagnosed as depression one month after the surgery and Yoo and others [3] report that donors experience psychological difficulties due to the wound after surgery regardless of sex, age, and marital status, which is the same as the results of our study. These uncertainties arise when the control and predictions are impossible and are followed by physical and psychological pathological phenomenon when they become serious. And they must be arbitrated in early stage because it will affect recovery after donation negatively.

This study has also found out that donors felt sorry about the attitude of recipients. This finding may be attributed to the individual character of each recipient but it is also considered that donors feel left out when most attention and interest are focused

on the recipient.

Like this, it is considered continuous mental-psychological follow up management for donors not limited to the care of the recipient is required because they experience a lot of mental-psychological difficulties. And more communication efforts especially between doctors and donors including between donors and recipients and their families are needed to alleviate their mental-psychological problems.

## 5 Conclusion

As the results, such as positive emotions, negative emotions, mental difficulties, and body image damaged and the 10 living liver donors are still experiencing mental-psychological difficulties even years after their donation. It is considered that their mental-psychological difficulties may continue in the future and appropriate medical management and continuous and systematic mental-psychological consultation before and after donation is required. And it is recommended to develop various education programs and prepare the support system and policy to protect and help living liver donors.

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